

**METHOD OF EMULATING MACHINE TOOL BEHAVIOR FOR PROGRAMMABLE
LOGIC CONTROLLER LOGICAL VERIFICATION SYSTEM**

ABSTRACT OF THE DISCLOSURE

5 A method is provided of emulating and visualizing
machine tool behavior for a programmable logic controller
logical verification system for manufacturing a motor vehicle.
The method includes the steps of constructing a mechanical
model. The method also includes the steps of viewing motion
10 of the mechanical model in a motion viewer and determining
whether the motion of the mechanical model is acceptable. The
method further includes the steps of replicating the motion
previously defined with PLC code if the motion of the
mechanical model was acceptable and using the accepted motion
15 of the mechanical model to compare the behavior of the PLC
code relative to the accepted motion.